

**PHASE II SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM  
STORMWATER MANAGEMENT PROGRAM**



City of Benbrook  
911 Winscott Road  
Benbrook, Texas 76126

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## 1.0 Overview

The City of Benbrook’s Storm Water Management Plan has been prepared to comply with the Phase II Storm Water Permitting Program of the U.S. Environmental Protection Agency (EPA) and Texas Commission on Environmental Quality (TCEQ). The Plan includes provisions of how the City will comply with the seven minimum measures required under the General Permit, plus the optional eighth measure offered by the TCEQ.

### Regulatory Requirement

In 1972, the U.S. Congress adopted the Federal Water Pollution Control Act Amendments (Public Law 92-500) which substantially strengthened the federal and state role in water pollution control. Among the goals of the 1972 Amendments were that the Nation’s rivers and lakes were to be fishable and swimmable by 1985. The 1972 Act recognized the importance of nonpoint sources (i.e. those sources of pollution which diffuse in nature) but most of the regulatory activity was directed toward point sources (i.e. those that discharged from a pipe outfall.) Under the 1972 Act, urban runoff was considered a nonpoint source.

In 1987, Congress passed the Clean Water Act that further amended the 1972 Act. Among its provisions were that the U.S. Environmental Protection Agency develop a program to regulate the quality of runoff from nonpoint sources, including certain industries, construction activities that exceed five acres, and cities with populations greater than 100,000. These “Phase I” regulations have been in place since 1990 and the activities covered must obtain a discharge permit from EPA.

The 1987 Clean Water Act also proposed a lesser program for Phase II cities, those with less than 100,000 population and for small construction projects (i.e. those from one to five acres in size. The final rules for the Phase II program were published by the U.S. Environmental Protection Agency on December 8, 1999 in the Federal Register (64 FR 68722). Benbrook was specifically identified under the proposed rules because it is located within the “urbanized area”. Under the 1999 Rules Benbrook had until March 10, 2003 to seek an individual permit, seek a joint permit with another regulated entity (such as Fort Worth), or file a Notice of Intent to comply with the General Permit. The City filed a Notice of Intent to comply with the General Permit. The General Permit required the development of a Storm Water Management Plan that addresses minimum control measures (MCM) in seven areas with an optional eighth MCM:

MCM 1	Public Education and Outreach and Involvement
MCM 2	Public Involvement/Participation
MCM 3	Illicit Discharge Detection and Elimination
MCM 4	Construction Site Storm Water Runoff Control
MCM 5	Post-Construction Storm Water Management in New Development and Redevelopment
MCM 6	Pollution Prevention/Good Housekeeping for Municipal Operations
MCM 7	Industrial Stormwater Sources is not applicable to Level 2 small MS4s
MCM 8	Optional MCM for Construction Done By the Permittee (MS4)

In 1998, the Texas Commission on Environmental Quality (TCEQ) received authority to administer discharge permits within the State of Texas. The TCEQ issued the general permit on August 13, 2007 that generally follows the requirements of the 1999 EPA Rules. The TCEQ

permit requires that municipalities prepare a Storm Water Management Plan that addresses the seven minimum measures included in the 1999 EPA Rules. It also establishes an optional eighth minimum measure that includes discharges from construction activities where the municipality is the operator. This simplifies the process for municipal projects that disturb over one acre of land in that notice of intent to comply with the general construction permit is not required.

Amendments and reissuance of the General Storm Water Permit were established in 2013. The permit added a section describing the kind of legal authority a small MS4 is required to have in order to develop and implement the SWMP. A section was also added to require small MS4s to ensure funding is available to meet the requirements of the permit.

The December 13, 2013 permit imposes compliance obligations on small MS4s based on the population inside the 2010 urbanized area and served by the small MS4. A four-level system is defined in Part II.B.5 of the permit which states:

- Level 1: Operators of traditional small MS4s that service a population less than 10,000 within an urbanized area;
- Level 2: Operators of traditional small MS4s that serve a population of at least 10,000 but less than 40,000 within an urbanized area. This category also includes all non-traditional small MS4s such as counties, drainage districts, transportation entities, military bases, universities, colleges, correctional institutions, municipal utility districts and other special districts regardless of the population served within the urbanized area, unless the nontraditional MS4 can demonstrate that it meets the criteria for a waiver from permit coverage based on the population served;
- Level 3: Operators of traditional small MS4s that serve a population of at least 40,000 but less than 100,000 within an urbanized area;
- Level 4: Operators of traditional small MS4s that serve a population of 100,000 or more within an urbanized area.

The January 24, 2019 permit imposes the same requirements as the December 13, 2013 permit but include the following additions:

- Electronic submittal of application and reports will be required by December 21, 2020.
- Minimum Control Measure 7, authorization of construction activities where the small MS4 is the site operator, has a lower benchmark value for total suspended solids (TSS) from 100 mg/l to 50 mg/l.
- The definition of construction activity is revised to include stockpiling of fill material and demolition.
- Implementation of the MS4 Remand Rule, which modifies the permit language so it becomes clear, specific and measurable.
- A requirement for the MS4 to post its annual reports and the SWMP on its website, if the MS4 has one.
- Addition a public notice process for certain Notice of Changes.
- Level 4 MS4s (MS4s serving a population of more than 100,000) must control the discharge of floatables in the MS4s and evaluate new and existing flood management projects to determine their impact on water quality.

- The application fee will now be \$400 instead of \$100.

The City is considered a Level 2a small MS4 under the permit since its population is approximately 23,590. A Level 2a SWMP must address seven areas, called Minimum Control Measures (MCM), as follows:

- Public Education and Outreach
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Stormwater Runoff Control
- Post-Construction Stormwater Management in New Development and Redevelopment
- Pollution Prevention and Good Housekeeping for Municipal Operations
- Optional MCM – Construction Done by the Permittee

For each MCM, the SWMP must:

- Define measurable goals that include the development of ordinances or other regulatory mechanisms, allowed by federal, state and local law, providing the legal authority necessary to implement and enforce the requirements of this permit, including information on any limitations to the legal authority;
- Define a schedule including the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action;
- Include written procedures describing how the permittee will implement the SWMP; and
- Include a description of a program or a plan of compliance to address discharges to impaired water bodies and Total Maximum Daily Load (TMDL) requirements.

### **Regulatory Authority**

The EPA regulations require that a City have adopted an ordinance that provides sufficient enforcement authority to implement the Storm Water Management Plan. Benbrook adopted its Storm Water Quality Ordinance (Ordinance 1124, codified as Chapter 15.42 of the Benbrook Municipal Code) on July 9, 2002.

The Storm Water Management Plan, Flood Hazard Protection Ordinance and Subdivision Ordinance allow the City to address the following:

- Authority to prohibit illicit discharges and illicit connections;
- Authority to respond to and contain other releases – control the discharge of spills, and prohibit dumping or disposal of materials other than stormwater into the MS4;
- Authority to require compliance with conditions in the City’s ordinances, permits and contracts;
- Authority to require installation, implementation and maintenance of control measures;
- Authority to receive and collect information, such as stormwater plans, inspection reports, and other information deemed necessary to assess compliance with this permit, from operators of construction sites, new or redeveloped land, and industrial and commercial facilities;

- Authority, as needed, to enter and inspect private property including facilities, equipment, practices, or operations related to stormwater discharges to the MS4;
- Authority to respond to non-compliance with BMPs required by the City consistent with the ordinances or other regulatory mechanism(s);
- Authority to assess penalties, including, monetary, civil or criminal penalties; and
- Ability to enter into interagency or interlocal agreements or other maintenance agreements as necessary.

### **City of Benbrook Organization and Resources**

The City of Benbrook is authorized by the State of Texas to enact ordinances and implement all of the regulatory requirements that the Phase II permit requires. The City of Benbrook implements BMPs “to the extent allowable under state and local law” as described in the appropriate Minimum Control Measures (MCM) sections of this SWMP.

#### ***Benbrook City Council***

The Benbrook City Council is the governing body for the City of Benbrook. The City Council consists of the Mayor, who is an elected official that presides over the full Council, and six City Council members from at-large places.

Major responsibilities include, but are not limited, to the following:

- Set tax rates and adopt the City budget
- Appoint City officials and hire personnel
- Fill elective and appointive vacancies
- Call City bond elections
- Let contracts and authorize payment of all City bills
- Provide Fire and Police protection for the residents and property owners
- Build and maintain City streets, bridges and drainage structures
- Manage City facilities
- Provide data service and archival needs of the City

#### ***Public Services Department***

The Public Services Department supervises the Engineering Department, Code Enforcement Department, Building Maintenance Department, Parks and Recreation Department, Public Works Department and Fleet Maintenance Department. The Public Services Department provides oversight of road, bridge, and subdivision construction activities through permitting, construction plan review and inspections. Inspection and management duties include inspecting utility installations and providing citywide assistance for other departments.

The Public Services Department is responsible for receiving and reviewing all permits related to development in the floodplain. The Public Services Department is responsible for ensuring that all development in the City is reasonably safe from flooding and for ensuring that no building occurs in the required setbacks and easements for subdivisions.

The Public Services Department will primarily participate in the Illicit Discharge, Detection and

Elimination MCM.

### ***Engineering Department***

The Engineering Department will primarily participate in the BMPs for Construction Site Stormwater Runoff Control and Post-Construction Stormwater Management as described in the New Development and Redevelopment MCM section.

The Engineering Department is responsible for developing, implementing and managing the SWMP. Other responsibilities include maintenance of the permitting system, water quality monitoring, sampling and reporting on general construction permits for public and City construction activities and assisting in the administration and enforcement of the City of Benbrook Rules and Regulations, related to stormwater quality, floodplain management and subdivisions.

The Engineering Department will participate in the administration and management of the SWMP and provide support for participating departments. It shall also ensure that there is adequate resources and funding to implement the requirements of the general permit.

### ***Building Maintenance Department***

The Building Maintenance Department is responsible for repairs and maintenance at City facilities, including:

- General construction and remodeling
- Electrical
- Heating, ventilation, and air-conditioning (HVAC)
- Janitorial services
- General property management

The Building Maintenance Department will primarily participate in the BMPs as described in the Pollution Prevention/ Good Housekeeping for Municipal Operations MCM section

### ***Fire Department***

The Benbrook Fire Department is charged with preserving and protecting lives and property from fire and other disasters. The department is responsible for Emergency Medical Services for the City of Benbrook and a portion of southwest Tarrant County, as well as Hazardous Materials safety and fire inspections. Also, the Fire Department provides community education on fire prevention and safety, health checks/classes, and tours of the Fire Station.

Responsibilities include:

- Emergency Management
- Emergency Medical Services
- Fire Protection
- Hazardous Materials
- Rescue Operations
- StormReady Community
- Community Services

The Fire Marshal's Office will primarily participate in the BMPs as described in the Illicit

Discharge Detection and Elimination and the Pollution Prevention/Good Housekeeping for Municipal Operations MCM sections.

### ***Parks and Recreation Department***

The City of Benbrook's Parks Department is responsible for maintaining Benbrook's parks system, public rights-of-way, and Benbrook Cemetery. Benbrook currently has six developed parks, comprising approximately 125 acres. In addition, one undeveloped park area is preserved in its natural state and may be developed in the future.

The Parks and Recreation Department will primarily participate in BMPs as described in the Illicit Discharge, Detection and Elimination MCM section.

### ***GIS Department***

The GIS (Geographical Information Systems) Department is responsible for developing and maintaining computerized data management systems designed to capture, store, retrieve, analyze, integrate, report, and display geographic and demographic data. The GIS staff provides support and training to other City departments and personnel. The GIS Department has developed and maintains an Internet Map Server (IMS) web site that provides City departments and the public with a platform for researching and reviewing spatial information about the City.

The GIS Department will primarily be participating in the BMPs described in the Illicit Discharge, Detection and Elimination and Pollutions Prevention/Good Housekeeping for Municipal Operations MCM sections.

### ***Public Works Department***

The Public Works Department is responsible for repair and maintenance of streets and bridges within the City. Street maintenance includes initial preparation for new construction, completing overlays, and seal coating. The Public Works Department maintains City easements and signs, and provides personnel for trash and debris removal. The Public Works Department also addresses City Council and constituent concerns and responds to emergencies, 24 hours a day, 7 days a week.

The Public Works Department will primarily participate in the BMPs described in the Pollution Prevention/ Good Housekeeping for Municipal Operations MCM section. Participation in BMPs described in other MCM sections will occur as needed, for City construction activities where more than one acre of land surface is disturbed.

### ***Public Information Department***

The Public Information Department provides administrative support to the City Manager and is responsible for developing communication tools and public input opportunities that are designed to inform and engage Benbrook citizens.

### ***Watersheds***

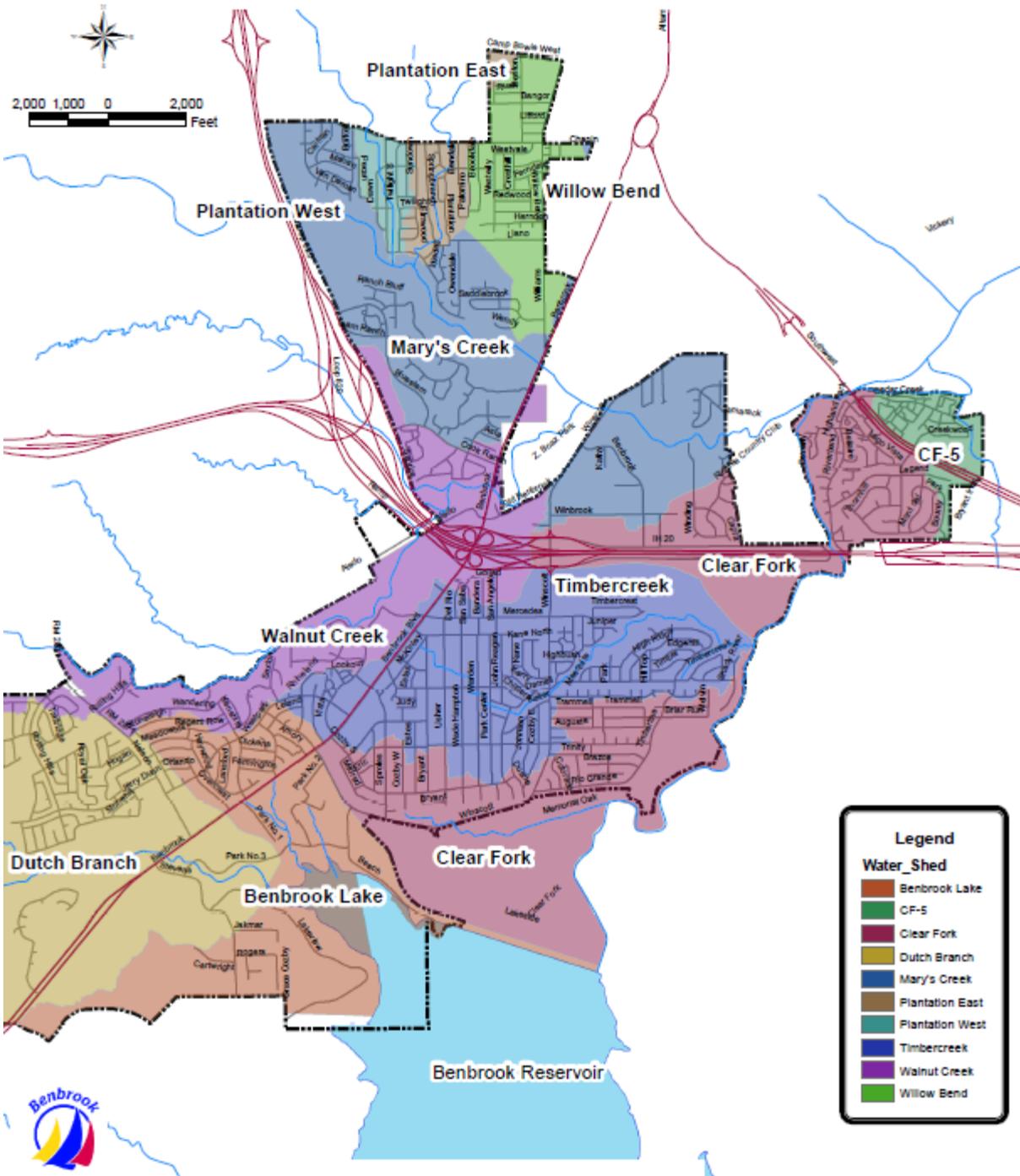
Benbrook has rolling topography with elevations ranging from a low of 580 feet above mean sea level (msl) to a high of 865 feet msl. To assist in analysis, the City has been divided into ten major

watersheds as shown in Figure 1. The watersheds are drained by the following streams:

Benbrook Lake	Plantation East
CF-5	Plantation West
Clear Fork	Timbercreek
Dutch Branch	Walnut Creek
Mary's Creek	Willow Bend

Development in these watersheds must meet all local, state and federal regulations prior to permit approval.

# Watershed Boundaries



## **Runoff Water Quality**

Recently, the issue of water quality in storm water has become more important. When storm water flows across the ground, it picks up and transports a number of pollutants, including sediment, oil and grease from roadways, fertilizers and pesticides from lawns, and other contaminants from various sources. For the past several decades, water pollution control has focused on 'point sources', such as sewage treatment plants and industrial waste treatment plants. In recent years, it has become evident that 'nonpoint source pollution' from runoff is now much more of a problem to water quality than point sources. As a result, the U.S. Environmental Protection Agency is implementing regulations designed to improve the quality of storm water.

In October 1992, the EPA promulgated storm water permit requirements for certain industrial and construction activities to protect storm water quality. Cities with populations greater than 100,000 were required to implement certain storm water quality management programs. Benbrook has participated in a program through the North Central Texas Council of Governments to develop region wide storm water programs. The committee has developed guidance documents for construction activities, residential development and industrial activities. Any new construction covering more than one acre is required to obtain a storm water permit from the U.S. EPA.

There is little data on water quality in streams in Benbrook. The Tarrant Regional Water District maintains three monitoring stations in Benbrook Lake. The nearest continuous automated river monitoring station is near downtown Fort Worth and is not representative of conditions in Benbrook. There are few known problems with water quality in streams and waterways in Benbrook.

In the Clear Fork Trinity River below Benbrook Lake, the U. S. Environmental Protection Agency has identified dioxin and PCBs in edible fish tissue. The City is continuing to work with various agencies to identify existing water quality in Benbrook streams and threats to that quality. The agencies include are the Benbrook Water Authority, City of Fort Worth, Tarrant County Health Department, Tarrant Regional Water District, Texas Commission on Environmental Quality, U.S. Army Corps of Engineers and U.S. Environmental Protection Agency.

The City has determined the MS4 is not the source of the Pollutants of Concern (POC). If the City becomes a source of POC in the future, then focused BMPs and measurable goals to reduce the POC will be developed within two years of that determination. A NOC will be submitted to TCEQ to update the SWMP to include the BMPs to address the POC.

## **Public Outreach Regarding Flood Hazards**

In addition to the direct drainage management activities, the City also performs a number of public information and outreach programs to inform the public of flood hazards. The Community Development Division routinely responds to 10 to 20 inquiries per month from residents regarding floodplain boundaries. The City and the City Engineer also perform technical evaluations of specific flooding or erosion problems for residents.

The City has provided a number of reference books on floodplain management to the Benbrook Public Library for use by the general public. These references are also available at City Hall. The City staff issues press releases from time to time on various flood management topics to the City's monthly newsletter and local newspaper. The City has compiled a mailing list of residents and landowners located within the floodplain for use in direct mail campaigns.

Benbrook participates in the Community Rating System for floodplain management. A requirement of Benbrook's participation includes at least one newsletter article annually to the entire community regarding floodplain management activities.

## **2.0 MCM 1: Public Education and Outreach and MCM 2: Public Involvement/Participation**

Public education and outreach are a key component to the success of the SWMP. Through public education, residents gain an understanding of how their actions affect stormwater quality and they become more informed about water quality issues in the community. When citizens understand that poor water quality can result from everyday activities, a major source of stormwater pollutants can be voluntarily eliminated. Perhaps more importantly, an educated public can be a broad base of support for a SWMP. The objective of a public education program is to promote a clear identification and understanding of the issues associated with stormwater pollution and to promote community ownership of the problems and solutions.

Public involvement and participation is another important component in the development and implementation of the SWMP. Involving the public goes hand-in-hand with the City's efforts and can help accomplish some of the same goals. Public involvement and participation can create more opportunities to gain expertise from interested individuals and other organizations or governmental entities. These added resources can add to the success of the program.

The City has been and continues to be dedicated to educating the community on the impacts stormwater can have on water quality, the hazards associated with illegal discharges, and the steps that can be taken to reduce pollutants in stormwater runoff, while involving the public through various opportunities in stormwater quality decision making and hands on projects affecting stormwater quality.

The City is a bedroom community with very little commercial or industrial activities. This program's priorities have been based on what has been determined during the previous stormwater permit periods. The priorities include illegal discharges such as grass clippings in the storm drain system and construction site run-off. The program is flexible so it can be revised as the needs required. The target audiences for this MCM include residents, business owners and home builders. The measurable goal for each BMP is shown on the table below.

### **2.1 TPDES Phase II Permit Requirements**

#### **2.1.1 Public Education and Outreach**

The City shall develop, implement and maintain a comprehensive stormwater education and outreach program to educate public employees, businesses, and the general public of hazards associated with the illegal discharges and improper disposal of waste and about the impact that stormwater discharges can have on local waterways, as well as the steps the public can take to reduce pollutants in the stormwater.

The City shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary to continue reducing the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). New elements must be fully implemented by the end of this permit term.. The program must, at a minimum:

- a. Define the goals and objectives of the program based on high priority community-wide

- issues;
- b. Identify the target audience(s);
- c. Develop or utilize appropriate educational materials, such as printed materials, billboard and mass transit advertisements, signage at select locations, radio advertisements, television advertisements and websites; and
- d. Determine cost effective and practical methods and procedures for distribution of materials.

Throughout the permit term, the City shall make the educational materials available to convey the program's message to the target audience(s) at least annually. The City will have all materials available at City Hall upon request and on the City's website, [www.ci.benbrook.tx.us/201/stormwater](http://www.ci.benbrook.tx.us/201/stormwater).

The City shall post its SWMP and the annual reports or summary of the annual reports on the City's website. The SWMP must be posted no later than 30 days after the approval date, and the annual report no later than 30 days after the due date.

The City shall review SWMP and MCM implementation procedures annually, and update as necessary. Any changes must be reflected in the annual report. Such written procedures must be maintained, either on site or in the SWMP and made available for inspection by the TCEQ.

MS4 operators may partner with other MS4 operators to maximize the program and cost effectiveness of the required outreach.

### **2.1.2 Public Involvement/Participation**

The City shall involve the public, and at a minimum, comply with any state and local public notice requirements in the planning and implementation activities related to developing and implementing the SWMP.

The City shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue to reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term. At a minimum, the City shall:

- a. Consider using public input in the implementation of the program;
- b. Create opportunities for citizens to participate in the implementation of control measures such as stream clean-ups, storm drain stenciling, volunteer monitoring, volunteer "Adopt-A-Highway" programs, and educational activities; and
- c. Ensure the public can easily find information about the SWMP.

BMPs anticipated to be used to address this MCM are presented in the table below. Included in each BMP is a description of what records will be maintained and provided in the annual reports.

**MCM 1: Public Education and Outreach**

Best Management Practice (BMP)	BMP Description	Measurable Goal	Responsible Party	Permit Years				
				1	2	3	4	5
BMP 1 Information on MS4 Operator's website	Maintain a webpage with current and accurate information and working links.	Make the SWMP and annual reports available for review on the City's website.	Public Services					
BMP 2 Social Media Outreach	Use social media to promote stormwater education, environmental events, and other opportunities to involve the public in water quality related issues.	Distribute via Social Media, at a minimum, 4 informational posts annually regarding stormwater quality, environmental event schedules and water quality educational information	Public Services					
BMP 3 Publish Articles in Local Newsletter	Use a local newsletter to promote stormwater education.	Develop stormwater topics that are group specific and address activities or pollutants of concern at seasonally appropriate time and publish in a local newsletter, at a minimum, 2 times per year.	Public Services					

Best Management Practice (BMP)	BMP Description	Measurable Goal	Responsible Party	Permit Years				
				1	2	3	4	5
BMP 4 Fact Sheets/Brochures	Provide BMP literature to residents, developers, and home builders detailing the importance of water quality..	Distribute materials to residents on lawn management, proper household waste disposal, pet waste, littering and other stormwater quality issues.	Public Services					
		Distribute literature to developers and builders at the time of permitting.						

**MCM 2: Public Involvement/Participation**

Best Management Practice (BMP)	BMP Description	Measurable Goal	Responsible Party	Permit Years				
				1	2	3	4	5
BMP 5 Stream/Lake or Watershed Clean-Up Events	Annual Trash Bash at Dutch Branch Park	Host one event per year. The land area cleaned must be a minimum of 2 acres or 400 yards of stream.	Public Services					

Best Management Practice (BMP)	BMP Description	Measurable Goal	Responsible Party	Permit Years				
				1	2	3	4	5
BMP 6 Hold Events to Educate Residents	Host events for drug take back and household hazardous waste and e-waste disposal.	Provide or support at minimum one event annually.	Public Services					
BMP 7 Educational Display at a Public Event	Provide educational display at public events for BMP 2.	Provide or support one booth or display annually.	Public Services					

**Note:**

The shaded portion of the table is the year the BMP will be implemented by December of the specified year.

Year 1 – December 2025

Year 2 – December 2026

Year 3 – December 2027

Year 4 – December 2028

Year 5 – December 2029

### **3.0 MCM 3: Illicit Discharge, Detection and Elimination (IDDE)**

The IDDE MCM is intended to detect, investigate and eliminate discharges to the MS4 system that are not entirely composed of stormwater. As identified in the Phase II TPDES permit, MS4 permittees are required to develop a strategy to detect, investigate and eliminate illicit discharges to the storm drain system. The EPA has defined an illicit discharge as “any discharge into a separate storm sewer system that is not composed entirely of storm water.”

Key to effectively detecting, investigating and eliminating illicit discharges is to have an up-to-date map showing the location of all outfalls discharging into waters of the United States and the names and locations of surface waters receiving discharges from the outfalls. An up-to-date storm sewer map containing the stormwater outfalls within the MS4 specifically describing the location of the outfalls and the names and locations of all receiving water bodies will be maintained.

The Illicit Discharge, Detection and Elimination (IDDE) MCM consists of BMPs that focus on the detection and elimination of illicit discharges into the MS4. Benbrook will work to encourage enforcement of city ordinances pertaining to watershed protection to prohibit illicit discharges (unallowable, non-stormwater discharges) to permitted storm sewer systems.

The target audiences will include residents and business owners. The measurable goals will be a reduction in enforcement actions. Specific goals for each BMP are shown in the table below.

#### **3.1 TPDES Phase II Permit Requirements**

##### **3.1.1 Program Development**

The City shall develop, implement and enforce a program to detect, investigate and eliminate illicit discharges into the MS4. The program shall include a plan to detect and address non-stormwater discharges, including illegal dumping to the MS4 system.

The City will assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term.

The IDDE program must include the following:

- An up-to-date map that shows the location of all outfalls operated by the City and that discharge into waters of the US. The map also shows the location and name of all surface waters receiving discharge from the MS4 outfalls;
- Methods for informing and training MS4 staff;
- Procedures for tracing the source of an illicit discharge;
- Procedures for removing the source of the illicit discharge; and
- Procedures to prevent and correct any leaking onsite sewage disposal systems that discharge into the MS4.

The City shall annually review and update as necessary, the SWMP and MCM implementation procedures. Any changes must be reflected in the annual report. Such written procedures must be maintained, either on site or in the SWMP and made available for inspection by the TCEQ.

##### **3.1.2 Allowable Non-Stormwater Discharges**

Non-stormwater flows listed below are not considered to be illicit discharges unless the flow has been identified by TCEQ or Benbrook as a significant source of pollutants to the MS4.

- Water line flushing (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);
- Runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;
- Discharges from potable water sources that do not violate water quality standards;
- Diverted stream flows;
- Rising ground waters and springs;
- Uncontaminated ground water infiltration;
- Uncontaminated pumped ground water;
- Foundation and footing drains;
- Air conditioning condensation;
- Water from crawl space pumps;
- Individual residential vehicle washing;
- Flows from wetlands and riparian habitats;
- Dechlorinated swimming pool discharges that do not violate Texas Surface Water Quality Standards;
- Street wash water excluding street sweeper wastewater;
- Discharges or flows from emergency firefighting activities (firefighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
- Other allowable non-stormwater discharges listed in 40 CFR § 122.26(d)(2)(iv)(B)(1);
- Non-stormwater discharges that are specifically listed in the TPDES Multi Sector General Permit (MSGP) TXR050000 or the TPDES Construction General Permit (CGP) TXR150000;
- Discharges that are authorized by a TPDES or NPDES permit or that are not required to be permitted; and
- Other similar occasional incidental non-stormwater discharges such as spray park water, unless the TCEQ develops permits or regulations addressing these discharges.

### **3.1.3 Requirements for all Permittees**

The City shall include the requirements below:

#### **a. MS4 Mapping**

The City shall maintain and up-to-date MS4 map, which must be located on site and available for review by the TCEQ. The MS4 map must show at a minimum the following information.

- The location of all small MS4 outfalls that are operated by the permittee and that discharge into waters of the U.S.;
- The location and name of all surface waters receiving discharges from the small MS4 outfalls; and
- Priority areas, if applicable.

b. Education and Training

The City shall implement a method for informing or training all the City's field staff that may into contact with or otherwise observe an illicit discharge or illicit connection to the small MS4 as part of their normal job maintained on site and made available for review by the TCEQ.

c. Public Reporting of Illicit Discharge and Spills

The City shall publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from the MS4. The City shall provide a central contact to receive reports; for example, by including a phone number for complaints and spill reporting.

d. The City shall develop and maintain on-site procedures for responding to illicit discharges and spills.

e. Source Investigation and Elimination

i. Minimum investigation requirements – Upon becoming aware of an illicit discharge, the City shall conduct an investigation to identify and locate the source of such illicit discharge as soon as practical.

- The City shall prioritize the investigation of discharges based on the relative risk of pollution. For example, sanitary sewer may be considered a high priority discharge.
- The City shall report to the TCEQ immediately upon becoming aware of the occurrence of any illicit flows believed to be an immediate threat to human health or the environment.
- The City shall track all investigations and document, at a minimum, the date(s) the illicit discharge was observed; the results of the investigation; any follow up of the investigation; and the date the investigation was closed.

ii. Identification and Investigation of the Source of the Illicit Discharge – The City shall investigate and document the source of illicit discharges within the City limits. If the source of the illicit discharge extends outside the City's boundary, the City shall notify the adjacent permitted MS4 operator or the appropriate TCEQ Regional Office.

iii. Corrective Action to Eliminate Illicit Discharge

If and when the source of the illicit discharge has been determined, the City shall immediately notify the responsible party of the problem, and shall require the responsible party to perform all necessary corrective actions to eliminate the illicit discharge.

f. Inspections – The City shall conduct inspections, in response to complaints, and shall conduct follow-up investigations to ensure the corrective measures have been implemented by the responsible party. The City shall develop written procedures describing the basis for conducting inspections in response to complaints and conducting follow-up inspections. The City shall notify TCEQ as soon as it is aware of illicit flows that may harm human health or environment.

Benbrook will continue to utilize inter-governmental cooperation in maintaining reporting hotlines, and it will also continue to train field personnel on how to recognize, report, and investigate illicit

discharges using the IDDE Guidance available from the NCTCOG (**Appendix A**).

In an effort to actively seek out illicit discharges, Benbrook will continue Dry Weather Screening using the Regional Protocol outlined in **Appendix B**.

Specific BMPs anticipated to be used to address this MCM are presented in the table below. Included in each BMP is a description of what records will be maintained and provided in the annual reports, responsible party, and implementation schedule.

**MCM 3: Illicit Discharge Detection and Elimination (IDDE)**

Best Management Practice (BMP)	BMP Description	Measurable Goal	Responsible Party	Permit Years				
				1	2	3	4	5
BMP 8 Storm System Mapping	Maintain a current and accurate MS4 map.	Update annually to include features which have been added, removed, or changed.	Public Services					
BMP 9 Field Staff Training	Conduct training for all the permittee's field staff.	Conduct one training annually for 100% of MS4 field staff.	Public Services					
BMP 10 Public Reporting of Illicit Discharges and Spills/Illicit Discharge Detection Campaign	Publicize and facilitate public reporting of illicit discharges, illegal dumping, or water quality impacts associated with discharges into or from the small MS4.	Review website notification system for the public to report the possibility of an illicit discharge into the MS4.	Public Services and Code Enforcement					
BMP 11 Complaint Procedures	Develop and maintain procedures for responding to illicit discharges, illegal dumping and spills.	Review and update procedures one time annually.	Public Services and Code Enforcement					
BMP 12 Source Investigations	Source investigation and elimination of illicit discharges and illegal dumping.	Respond to 100% of known illicit discharges and illegal dumping incidents each year	Public Services and Code Enforcement					

Best Management Practice (BMP)	BMP Description	Measurable Goal	Responsible Party	Permit Years				
				1	2	3	4	5
BMP 13 Corrective Actions	Corrective action to eliminate illicit discharges and illegal dumping	For 100% of illicit discharges or illegal dumping where a source has been determined, notify the responsible party within 24 hours and require corrective actions to eliminate the illicit discharge.	Public Services and Code Enforcement					
BMP 14 Illicit Discharge Inspection Procedure	Evaluate existing inspection procedures.	Annually review and update to address changes and make improvements.	Public Services and Code Enforcement					
BMP 15 Respond to Complaints	Inspections in response to complaints.	Conduct inspections in response to 100% of complaints annually and conduct follow up inspections.	Public Services					

**Note:**

The shaded portion of the table is the year the BMP will be implemented by December of the specified year.

Year 1 – December 2025

Year 2 – December 2026

Year 3 – December 2027

Year 4 – December 2028

Year 5 – December 2029

#### **4.0 MCM 4: Construction Site Stormwater Runoff Control**

Construction site stormwater runoff control measures are designed to prevent soil and construction debris from entering the MS4 system from construction sites. During construction activities, vegetation and topsoil can be stripped away, making the area especially vulnerable to erosion, and the activities performed on construction sites usually disturb a large amount of land and generate large amounts of waste. The process has generally been found to lead to high levels of sediment, phosphorus, nitrogen, pesticides, petroleum derivatives, construction chemicals, and solid wastes in receiving streams nationwide.

MS4 operators are required to develop, implement, and enforce a program to reduce pollutants in stormwater runoff to the MS4 from construction activities that result in a land disturbance of one acre or greater and to ensure that construction site operators use appropriate erosion and sediment controls to reduce or eliminate impacts on receiving water bodies.

As such, Benbrook is required to implement procedures to review construction site plans and to conduct inspections of large and small construction projects. Written procedures will be used to review construction site plans, which describe which plans will be reviewed as well as when an operator may begin construction. The procedure will also include instructions on performing the site plan reviews so that the City's review process is consistent. Construction site inspections will be conducted in accordance with established procedures by trained field staff.

All Benbrook-owned construction sites will comply with TCEQ Construction General Permit No. TXR150000. Each required site will incorporate a Stormwater Pollution Prevention Plan (SWP3) including adequate sediment and erosion controls. Waste from construction sites shall be the responsibility of the contractor performing the work. Contractors shall be responsible for addressing construction waste based on the appropriate Federal, State and local laws. City crews will be responsible for managing construction waste from City-led projects.

The target audiences will be home builders and contractors related to the development business and the measurable goals will be a reduction in enforcement action. Specific goals for each BMP are shown in the table below.

#### **4.1 TPDES Phase II Permit Requirements**

##### **4.1.1 Requirements and Control Measures**

The City shall develop, implement and enforce a program requiring operators of small and large construction activities to select, install, implement and maintain stormwater control measures to prevent illicit discharges to the MEP. The program must include the development and implementation of an ordinance or other regulatory mechanism, as well as sanctions to endure compliance to the extent allowable under state, federal and local law, to require erosion and sediment control.

The City shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of the permit term.

If TCEQ waives requirements for stormwater discharges associated with small construction from a specific site(s), the City is not required to enforce the program to reduce pollutant discharges from such site(s).

#### 4.1.2 Requirements for all Permittees

The City shall include the requirements described below:

- a. The City shall annually review and update as necessary, the SWMP and MCM implementation procedures. Any changes must be included in the annual report. Such written procedures must be maintained on site or in the SWMP and made available for inspection by the TCEQ.
- b. The City shall require that construction site operators implement appropriate erosion and sediment controls BMPs. The City's construction program must ensure the following minimum requirements are effectively implemented for all small and large construction activities discharging to its small MS4.
  - i. Erosion and Sediment Controls – Design, install and maintain effective erosion controls and sediment controls to minimize discharge of pollutants.
  - ii. Soil Stabilization – Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for period exceeding 14 calendar days. Stabilization must be completed as soon as practicable, but no more than 14 calendar days after the initiation of soil stabilization measures. In arid, semiarid and drought-stricken areas, where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed. The City shall develop written procedures that describes initiating and completing stabilization measures for construction sites.
  - iii. BMPs – Design, install, implement and maintain effective BMPs to minimize the discharge of pollutants to the small MS4. At a minimum, such BMPS must be designed, installed, implemented and maintained to:
    - a. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water and other wash waters;
    - b. Minimize exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and
    - c. Minimize the discharge of pollutants from spills and leaks.
  - iv. As an alternative to (i) to (iii) above, the City shall ensure that all small and large construction activities discharging to the small MS4 have developed and implemented a stormwater pollution prevention plan (SWP3) in accordance with the TPDES CGP TX150000. In arid, semiarid and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed and described in the written procedure required in item (b)i above. As an alternative, vegetative stabilization measures may be implemented as soon as practicable.
- c. Prohibited Discharges – The following discharges are prohibited:

- i. Wastewater from washout of concrete and wastewater from water well drilling operations, unless managed by an appropriate control;
- ii. Wastewater from washout and cleanout of stucco, paint, from release oils and other construction materials;
- iii. Fuels, oils or other pollutants used in vehicle and equipment operation and maintenance;
- iv. Soaps or solvents used in vehicle and equipment washing; and
- v. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed by appropriate BMPs.

d. Construction Plan Review Procedures

To the extent allowable by state, federal and local law, the City shall maintain and implement site plan review procedures that describe which plans will be reviewed as well when an operator may begin construction. The site plan procedures must meet the following minimum requirements:

- i. The site plan review procedures must incorporate consideration of potential water quality impacts;
- ii. The City may not approve any plans unless the plans contain appropriate site-specific construction site control measures that, at a minimum, meet the requirements described in the TPDES CGP, TXR150000. The City may require and accept a plan, such as a SWP3, that has been developed pursuant to the TPDES CGP, TXR150000.

e. Construction Site Inspections and Enforcement

To the extent allowable by state, federal and local law, the City shall implement procedures for inspecting large and small construction projects. .

- i. The City shall conduct inspections based on the evaluation of factors that are a threat to water quality, such as: soil erosion potential, site slope, project size and type, sensitivity of receiving waterbodies, proximity to receiving waterbodies, non-stormwater discharges, and past record of non-compliance by the operators of the construction site.
- ii. Inspections must occur during the active construction phase.
  - a. The City shall develop and implement updated written procedures outlining the inspection and enforcement requirements. These procedures must be maintained on-site or in the SWMP and be made available to TCEQ.
  - b. Inspections of construction sites must, at a minimum:
    - 1. Determine whether the site has appropriate coverage under the TPDES CGP, TXR150000. If no coverage exists, notify the permittee of the need for permit coverage;
    - 2. Conduct a site inspection to determine if control measures have been selected, installed, implemented and maintained according to the small MS4's requirements;

3. Assess compliance with the permittee's ordinances and other regulations; and
  4. Provide a written or electronic inspection report.
- iii. Based on site findings, the City shall take all necessary follow-up actions (for example, follow-up inspections or enforcement) to ensure compliance with permit requirements and the SWMP. These follow-up and enforcement actions must be tracked and maintained for review by the TCEQ.
- f. Information submitted by the Public  
The City shall develop, implement and maintain procedures for receipt and consideration of information submitted by the Public.
  - g. MS4 Staff Training  
The City shall ensure that all staff whose primary job duties are related to implementing the construction stormwater program (including permitting, plan review, construction site inspections, and enforcement) are informed or trained to conduct these activities. The training may be conducted by the City or by outside trainers.

Site inspections will be conducted at Benbrook-owned construction sites in accordance with the TCEQ Construction General Permit, in accordance with the procedure contained in **Appendix C**. Follow-up inspections will be conducted, as needed, based on inspection findings.

BMPs anticipated to be used to address this MCM are presented in the table below. Included in each BMP is a description of what records will be maintained and provided in the annual reports, responsible party, and implementation schedule.

**MCM 4: Construction Site Stormwater Runoff Control**

Best Management Practice (BMP)	BMP Description	Measurable Goal	Responsible Party	Permit Years				
				1	2	3	4	5
BMP 16 Construction Site Stormwater Runoff Control Ordinances	Review existing stormwater ordinances, if necessary, which outlines the necessary requirements for Construction Site Operators to comply with permit requirements for Construction Site Stormwater Runoff Control.	Review and update existing ordinances, if necessary, at least one time during permit term.	Public Services and Engineering					
BMP 17 Prohibit Illicit Discharges	Develop and maintain an ordinance to prohibit illicit discharges as described in Part IV.D.4.(b)(2) of the General Permit.	Annually evaluate and update existing ordinance.	Public Services and Engineering					
BMP 18 Site Plan Review	Maintain and implement site plan review that describe which plans will be reviewed as well as when an operator may begin construction.	Annually review and update site plan review procedures. Implement site plan review for 100% of new construction site plans.	Public Services and Engineering					
BMP 19 Site Inspection Procedures	Implement procedures for inspecting large and small construction projects.	Annually evaluate and update inspection procedures.	Public Services and Engineering					
BMP 20 Construction Site Inspection	Conduct construction site inspections.	Conduct inspections of 80% of active construction site annually. Conduct follow up inspections of 100% of cases.	Public Services and Engineering					

Best Management Practice (BMP)	BMP Description	Measurable Goal	Responsible Party	Permit Years				
				1	2	3	4	5
BMP 21 Information Submitted by the Public	The City's website will allow the public to report violations regarding construction site erosion control and BMP violations.	Annually evaluate and update website, if necessary.	Public Services and Engineering					
BMP 22 MS4 Employee Training	Provide training to City staff that have the potential to perform construction site inspections.	Provide annual training to City staff.	Public Services and Engineering					

**Note:**

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Year 1 – December 2025

Year 2 – December 2026

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## **5.0 MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment**

Post-construction stormwater management in new development and redevelopment focuses on the implementation of controls to maintain good water quality conditions after an area has been developed. New development can also have a significant effect on water quality because during the course of development, natural landscapes are often replaced by impermeable streets, parking lots, sidewalks, other paved surfaces and structures that lead to increases in both the volume of stormwater runoff and the accompanying pollutants that reach local waterbodies.

The MS4s are required to develop, implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that discharge to the small MS4. The program must ensure that controls are in place to prevent or minimize water quality impacts.

The City of Benbrook allows the use of both lined and unlined drainage ditches and concrete curb and gutter pavement sections in combination with underground storm sewer/drain pipe systems to convey stormwater. Compared to standard impervious underground storm sewer/drain pipe systems, at grade open/unlined grassy ditch systems allow more stormwater runoff to soak or filter into the ground. This type of low impact drainage system thereby reduces downstream runoff velocities and erosion, and provides a means of detaining and treating, to some degree, pollutants such as sediments, fertilizers, nutrients, detergents, etc. It also allows illicit discharges to pool and collect making them easier to detect, locate and consequently to investigate the probable source, thus expediting the illicit discharge detection and elimination.

Benbrook maintains these systems when they are located within the City Rights-of-Way, easements and prescriptive easements, and shall continue to do so throughout the permit period.

Benbrook will continue participation with NCTCOG on municipal stormwater issues through the Regional Stormwater Committee and the integrated Stormwater Management program. The program includes cooperative initiatives that are regional and development of the annual regional stormwater work program. Construction Site Stormwater Runoff Control is achieved regionally by utilizing the NCTCOG website for informational support and access to Best Management Practices (BMPs). Coordination meetings with program updates including watershed roundtable discussions for the multiple municipalities, counties and governmental agencies are facilitated by NCTCOG quarterly.

Post-construction stormwater quality regulations and technical standards for new development and redevelopment projects are implemented and enforced within the City MS4 that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development. The mechanism of enforcement includes the permitting system administered by the Public Services Department.

Proposed control measures are reviewed during the permitting process and are inspected post-construction. To ensure long-term maintenance of structural controls, responsible parties are determined during the permitting process. The City will develop and implement regulations, regulatory mechanisms, and procedures to the extent allowable under State law, to ensure adequate long-term operation and maintenance of post-construction stormwater control measures discharging to the City MS4. Regulations and mechanisms may include specifying responsible parties through subdivision plat notes, drainage/conservation easements, or maintenance

agreements. Benbrook will implement procedures for periodic inspection and maintenance of structural controls for which Benbrook takes responsibility as part of the City's infrastructure.

The integrated Stormwater Management Program is a cooperative initiative that assists cities and counties in achieving their water quality protection, stream bank protection and flood mitigation goals, while also helping communities meet their construction and post-construction obligations under TCEQ's stormwater management permit.

The target audiences will be Homeowner Associations, business owners, commercial developers and commercial property managers. The measurable goals will be a reduction in enforcement actions. Specific goals for each BMP are shown in the table below.

## **5.1 TPDES Phase II Permit Requirements**

### **5.1.1 Post-Construction Stormwater Management Program**

- a. The City shall develop, implement and enforce the program, to the extent allowable under state, federal and local law, to control stormwater discharges from new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development or sale. The program must be established for private and public development sites. The program must utilize an offsite mitigation and payment in lieu of components to address this requirement.

The City shall assess program elements that were described in the previous permit and modify as necessary to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term.

- b. The City shall use, to the extent allowable under state, federal and local law and local development standards, an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects. The City shall establish, implement and enforce a requirement that owners or operators of new development or redevelopment sites design, install, implement and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality. If the construction of permanent structures is not feasible due to space limitations, health and safety concerns, cost effectiveness or highway construction codes, the City may propose an alternative approach to TCEQ.

### **5.1.2 Requirements for all Permittees**

The City shall include the requirements described below:

- a. The City shall annually review and update as necessary, the SWMP and MCM implementation procedures as required by this SWMP. Any changes must be included in the annual report. Such written procedures must be maintained either on site or in the SWMP and made available for inspection by TCEQ.
- b. The City shall document and maintain records of enforcement actions and make them available for review by the TCEQ.
- c. Long-term Maintenance of Post-Construction Stormwater Control Measures

The City shall, to the extent allowable under state, federal and local law, ensure the long-term operation and maintenance of structural stormwater control measures installed through one or both of the following approaches:

- i. Maintenance performed by the City.
- ii. Maintenance performed by the owner or operator of a new development or redevelopment site under a maintenance plan. The maintenance plan must be filed in real property records of Tarrant County. The City shall require the owner or operator of any new development or redeveloped site to develop and implement a maintenance plan addressing maintenance requirements for any structural control measures installed on site. The City shall require operation and maintenance performed is documented and retained on site, such as at the offices of the owner or operator, and made available for review by the small MS4.

BMPs anticipated to be used to address this MCM are presented in the table below. Included in each BMP is a description of what records will be maintained and provided in the annual reports, responsible party, and implementation schedule.

**MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment**

Best Management Practice (BMP)	BMP Description	Measurable Goal	Responsible Party	Permit Years				
				1	2	3	4	5
BMP 23 Stormwater Ordinance for Post-Construction Management	Evaluate and update existing stormwater ordinance that outlines the necessary requirements for Post-Construction Management in new and redevelopment projects	Annually evaluate and update existing ordinance, if necessary.	Public Services and Engineering					
BMP 24 Enforcement Actions	Document and maintain records of enforcement actions and make available for review by TCEQ.	Maintain records of 100% of enforcement actions. Make 100% of enforcement records available to TCEQ within 24 hours of request.	Public Services, Engineering, and Code Enforcement					
BMP 25 Operation and Maintenance of Structural Stormwater Controls	Ensure the long term operation and maintenance of structural stormwater control measures installed.	Maintain 100% of stormwater control each year where the small MS4 or the owner is the operator.	Public Services, Engineering and Code Enforcement					

**Note:**

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Year 1 – December 2025

Year 2 – December 2026

Year 3 – December 2027

Year 4 – December 2028

Year 5 – December 2029

## **6.0 MCM 6: Pollution Prevention/Good Housekeeping for Municipal Operations**

Municipalities conduct a variety of activities throughout their daily operations, which have the potential to affect water quality throughout the community. With the adoption and implementation of stormwater management policies and procedures, the City of Benbrook will protect stormwater quality and continue to deliver public services at the present service levels. A variety of municipal operations is affected by stormwater management policies and procedures. These municipal operations include, but not limited to, parks maintenance, open space management, streets and rights-of-way management, fleet and building maintenance, city construction projects and stormwater system maintenance.

Benbrook will update and maintain an inventory of facilities and stormwater controls that it owns and operates. The inventory must include the following types of facilities:

- Composting facilities
- Equipment storage and maintenance facilities
- Fuel storage facilities
- Hazardous waste disposal facilities
- Hazardous waste handling and transfer facilities
- Incinerators
- Landfills
- Materials storage yards
- Pesticide storage facilities
- Buildings, including schools, libraries, police stations, fire stations, and office buildings
- Parking lots
- Golf courses
- Swimming pools
- Public works yards
- Recycling facilities
- Solid waste handling and transfer facilities
- Street repair and maintenance sites
- Vehicle storage and maintenance yards
- Structural stormwater controls

O&M activities are evaluated for their potential to discharge pollutants into stormwater. Pollutants of concern from these activities will be identified, and pollutant prevention measures will be developed and implemented. Standard procedures will be developed to visually inspect the pollution prevention measures and maintain structural controls. Finally, Benbrook employees responsible for municipal operations will be trained on implementing pollution prevention and good housekeeping practices.

Benbrook's procedures for the removal and proper disposal of waste will be reviewed and revised as necessary. All contractors hired by Benbrook must comply with all operating procedures.

The target audience is City staff members from the following departments: Building Maintenance; Parks; Streets; Fleet and Code Enforcement. The measurable goals include a reduction in enforcement actions. Specific goals for each BMP are shown in the table below.

## **6.1 TPDES Phase II Permit Requirements**

### **6.1.1 Program Development**

The City shall develop and implement and operation and maintenance program, including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal activities and municipal owned areas including but not limited to park and open space maintenance, street maintenance, fleet and building maintenance, stormwater system maintenance, new construction and land disturbances, municipal parking lots, vehicle and equipment maintenance and storage yards, waste transfer stations and sand/salt storage locations.

The City shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharges of pollutants from the MS4 to the MEP.

### **6.1.2 Requirements for all Permittees**

The City shall include the requirements described below in the program:

#### **a. City-Owned Facilities and Control Inventory**

The City shall develop and maintain an inventory of facilities and stormwater controls that it owns and operates within the regulated area of the small MS4. The inventory must include all applicable permit numbers, registration numbers and authorizations for each facility or controls. The inventory must be available for review by TCEQ and must include, but is not limited, to the following, as applicable:

- i. Composting facilities;
- ii. Equipment storage and maintenance facilities;
- iii. Fuel storage facilities;
- iv. Hazardous waste disposal facilities;
- v. Hazardous waste handling and transfer facilities;
- vi. Incinerators;
- vii. Landfills;
- viii. Materials storage yards;
- ix. Pesticide storage yards;
- x. Buildings, including schools, libraries, police stations, fire stations and office buildings;
- xi. Parking lots;
- xii. Golf courses;
- xiii. Swimming pools;
- xiv. Public Works yards;
- xv. Recycling facilities;
- xvi. Salt storage facilities;

- xvii. Solid waste handling and transfer facilities;
  - xviii. Street repair and maintenance sites;
  - xix. Vehicle storage and maintenance yards; and
  - xx. Structural stormwater controls.
- b. Training and Education
- The City shall inform or train appropriate employees involved in implementing pollution prevention and good housekeeping practices. The City shall maintain a training attendance list for inspection by TCEQ when requested.
- c. Disposal of Waste Material
- Waste materials removed from the small MS4 must be disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable.
- d. Contractor Requirements and Oversight
- i. Any contractors hired by the permittee to perform maintenance activities on City-owned facilities must be contractually required to comply with all of the stormwater control measures, good housekeeping practices and facility specific stormwater management operating procedures described in this SWMP.
  - ii. The City shall provide oversight of contractor activities to ensure that contractors are using appropriate control measures and SOPs. Oversight procedures must be maintained on-site and made available for inspection by TCEQ.
- e. Municipal Operation and Maintenance Activities
- i. Assessment of permittee-owned operations
- The City shall evaluate operation and maintenance (O&M) activities for their potential to discharge pollutants in stormwater, including but not limited to:
- a. Street and parking lot maintenance, including such areas as pothole repair, pavement marking, sealing and re-paving;
  - b. Bridge maintenance, including such areas as re-chipping, grinding and saw cutting;
  - c. Cold weather operations, including plowing, sanding and application of deicing and anti-icing compounds and maintenance of snow disposal areas; and
  - d. Right-of-way maintenance, including mowing, herbicide and pesticide application and planting vegetation.
- ii. The City shall identify pollutants of concern that could be discharged from the above O&M activities (for example, metals; chlorides; hydrocarbons such as benzene, toluene, ethyl benzene and xylenes; sediment and trash).
  - iii. The City shall develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the above activities. These pollution prevention measures may include the following activities:
    - a. Replacing materials and chemicals with more environmentally benign materials

or methods;

- b. Changing operations to minimize exposure or mobilization of pollutants to prevent them from entering surface waters; and
- c. Placing barriers around or conducting runoff away from deicing chemical storage areas to prevent discharge into surface waters.
- iv. Inspection of pollution prevention measures – all pollution prevention measures implemented at City-owned facilities must be visually inspected to ensure they are working properly. The City shall develop written procedures that describe frequency of inspections and how they will be conducted. A log of inspections will be maintained and made available for review by the TCEQ.
- f. Structural Control Maintenance

If BMPs include structural controls, maintenance of the controls must be performed by the City and consistent with maintaining the effectiveness of the BMP. The City shall develop written procedures that define the frequency of inspections and how they will be conducted.

BMPs anticipated to be used to address this MCM are presented in the table below. Included in each BMP is a description of what records will be maintained and provided in the annual reports, responsible party, and implementation schedule.

**MCM 6: Pollution Prevention/Good Housekeeping for Municipal Operations**

Best Management Practice (BMP)	BMP Description	Measurable Goal	Responsible Party	Permit Years				
				1	2	3	4	5
BMP 26 Permittee-owned Facilities and Control Inventory	Develop and maintain an inventory of facilities and stormwater controls that it owns and operates within the regulated area of the small MS4.	Develop and maintain an inventory of facilities and stormwater controls that the City owns and operates within the regulated area of the MS4. Update annually.	Public Services, Public Works, Fleet, Parks, Building Maintenance					
BMP 27 Employee Training	Provide employee training to prevent and reduce stormwater pollution from activities such as park maintenance, fleet and building maintenance, new construction, land disturbance and stormwater management.	Provide annual training to staff regarding pollution prevention and good housekeeping.	Public Services, Engineering					
BMP 28 Disposal of Waste Removed from MS4	Develop a standard operating procedure for the disposal of waste removed from the MS4, including dredged soil, accumulated sediments and floatables.	Develop and implement a standard operating procedure for waste disposal. Review annually.	Public Services, Engineering					
BMP 29 Contractor Requirements and Oversight	Provide contractor oversight for landscaping and maintenance contracts and revise contract verbiage to require lawn maintenance contractors to follow City adopted stormwater quality BMPs.	Oversight procedures must be maintained on-site 100% of the time and made available for review by TCEQ within 24 hours of request.	Public Services					

Best Management Practice (BMP)	BMP Description	Measurable Goal	Responsible Party	Permit Years				
				1	2	3	4	5
BMP 30 Municipal Operations and Maintenance Activities	Assess City operations and maintenance practices, identify pollutants of concern, as well as develop and implement a set of pollution prevention measures to reduce the discharge of pollutants in the stormwater and perform pollution prevention inspection measures.	Evaluate 100% of operations and maintenance annually.	Public Works, Fleet, Parks, Building Maintenance					
BMP 31 Pollutants of Concern	Identify pollutants of concern.	Maintain a list of 100% of pollutants that could be discharged from operation and maintenance activities.	Public Works, Fleet, Parks, Building Maintenance					
BMP 32 Pollution Prevention Measures	Develop pollution prevention measures to reduce pollutants in stormwater from City operations.	Implement the pollution prevention measures. Review annually.	Public Works, Fleet, Parks, Building Maintenance					
BMP 33 Inspection of Pollution Prevention Measures	Visually inspect 100% of pollution prevention measures implemented at City owned facilities.	Review and update the inspection procedures annually. Maintain a log of 100% of inspections.	Public Works, Fleet, Parks, Building Maintenance					
BMP 34 Structural Control Maintenance	Annually perform maintenance of 100% of structural controls that require maintenance.	Review and update maintenance procedures annually.	Public Works, Fleet, Parks, Building Maintenance					

**Note:**

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## **7.0 MCM 7: Industrial Stormwater Sources**

Permittees operating a Level 4 small MS4 shall include the requirements described in Part III.B.6(a) and (b) of the TCEQ General Permit Number TXR040000. The City of Benbrook is a Level 2a small MS4 and is not required to complete the requirements of this section.

## **8.0 MCM 8: Municipal Construction Activities (Optional)**

The City of Benbrook also plans to regulate municipal construction site activities under the optional minimum control measure No. 8 offered by the TCEQ. This coverage includes construction exceeding one-acre in extent that is conducted directly by City personnel or by contractors working directly for the City on a capital improvement project. This activity does not include public improvement construction being performed by developers, such as subdivision construction. This activity will occur only within the city limits of the City of Benbrook. All required SWP3s and records management will meet TCEQ's requirements. All the MCMs will be implemented across the entire City of Benbrook.

### **8.1 Projects Built By City Forces**

Construction activities performed directly by City personnel are generally small and many will fall under the one-acre criteria. For those City constructed projects that do exceed one-acre in extent, the City will implement appropriate construction best management practices as identified in the "Storm Water Quality Best Management Practices for Construction Activities," latest edition, published by the North Central Texas Council of Governments. These BMPS will often include silt fences, inlet protection, stabilized construction entrances and sediment filter dikes. In some cases, sediment basins may be required. The Stormwater Pollution Prevention Plan (SWPPP) will also cover small construction activities that disturb less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal or greater than one acre and less than 5 acres of land.

The construction activities will generally be conducted so as to take into consideration local conditions of weather, soils and other site-specific considerations.

- Soils information will be required – SWPPP will show locations of unstable or highly erodible soils as determined by the Tarrant County Soil Survey and/or soil tests. SWPPP will show the location of any test borings on the plan and any geotechnical studies will be provided. Other soils information such as permeability, perched water table, etc. may be included. Soil disturbance will be minimized to prevent stormwater runoff from entering the storm drain system and soil erosion BMPs will be in place prior to the start of the project.
- Weather impacts - SWPPP shall include a plan of action in case of inclement weather. Rain events are the usual weather element that can affect construction projects in Benbrook. Projects will be scheduled when there is less chance of rain to minimize the impact.
- Site-specific considerations - SWPPP shall include site specific conditions such as surface water locations, existing natural areas, special notes for critical areas, site development, limits of grading and clearing, vicinity map, etc. Appropriate BMPs will be included in the project and revised as necessary.

- Inspections - Inspections will be conducted by City staff immediately after storm events greater than 0.5 inches of rain in a 24-hour period, or as required by the TCEQ regulations.

For complex projects, city staff will consult with the City Engineer for an appropriate SWPPP design. The City Engineer will be responsible for submitting necessary documentation to the TCEQ.

BMP installation will be inspected on a regular basis by the City's public improvements inspector, who also serves as the City's primary erosion control inspector. The City's inspector works in a different Department than the Street and Park crews and will report violations through the Director of Public Services.

Upon completion, projects will be stabilized with perennial vegetation or mulch. Erosion control features will remain in place until 70 percent coverage is obtained.

## **8.2 Projects Built Under Contract for City**

The City also constructs streets, drainage projects, and public buildings as part of its capital improvement program. These projects are designed by or under the supervision of the City Engineer. All plans for projects built under this General Permit will include a SWP3 as part of the plan documents. The General Conditions and Specifications in the Contract Documents will include a requirement by the contractor to conform to the erosion control provisions of the design, or as may be modified by the City in the field, as well as all applicable State and Federal regulations. The Contractor will be responsible to submit all necessary documentation to the TCEQ.

In addition to the Contractor's own inspections, the City's Public Improvements Inspector will inspect all capital improvement projects for conformance with the provisions of the SWP3. The Contractor will be responsible for maintaining records of maintenance activities on the BMPs. The City requires a two-year maintenance bond for all capital improvement projects and will use this to assure that final stabilization is achieved. BMPs will remain in place until 70 percent coverage is established.

## **9.0 Recordkeeping and Reporting Activities**

As detailed in TPDES General Permit TXR040000, the City must document and report the implementation of all stormwater BMPs throughout the course of the permit period, and the TCEQ will require that the City submit annual reports to document the development and implementation of the SWMP.

### **9.1 Recordkeeping**

In order to properly evaluate the success of the SWMP, the City must document the development and implementation of all stormwater programs throughout the permit period, and as referenced in the TPDES General Permit, the City must comply with a series of recordkeeping requirements:

1. The City shall maintain all records, a copy of this TPDES general permit, and records of all data used to complete the application (NOI) for this general permit and satisfy the public participation requirements, for a period of at least three (3) years, or for the remainder of the term of this general permit, whichever is longer. This period may be extended by request of the Executive Director at any time.
2. The City shall submit records to the Executive Director only when specifically asked to do

so. The SWMP required by this general permit must be retained at a location accessible to the TCEQ.

3. The City shall make the NOI and the SWMP available to the public at reasonable times during regular business hours, if requested to do so in writing. Copies of the SWMP must be made available within ten (10) working days of receipt of written request. Other records must be provided in accordance with the Texas Public Information Act. However, all requests for records from federal facilities must be made in accordance with the Freedom of Information Act.
4. The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the City.

## **9.2 Reporting**

### **General Reporting Requirements**

#### **9.2.1 Noncompliance Notification**

According to 30 TAC 305.125(9), any noncompliance which may endanger human health or safety, or the environment, must be reported by the permittee to the TCEQ. Report of such information must be provided orally or by electronic facsimile transmission to the TCEQ regional office within 24 hours of becoming aware of the noncompliance. A written report will be provided by the City to the appropriate TCEQ regional office and to the TCEQ Enforcement Division (MC-224) with five working days of becoming aware of the noncompliance. The written report must contain:

1. A description of the noncompliance and its cause;
2. The potential danger to human health or safety or the environment;
3. The period of noncompliance, including the exact dates and times;
4. If the noncompliance has not been corrected, the anticipated time it is expected to continue; and
5. Steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance and to mitigate its adverse effects.

#### **9.2.2 Other Information**

When the City becomes aware that it either submitted incorrect information or failed to submit complete and accurate information requested in an NOI, NOT or NOC or any other report, the City will promptly submit the facts or information to the Executive Director.

#### **9.2.3 Annual Report**

The City will submit a concise annual report to the Executive Director within 90 days of the end of each reporting year. For the purpose of this section, the reporting year may include the permit year, the City's fiscal year or the calendar year, as elected by the City and notified to the TCEQ in the application submittal. The annual report will address the previous reporting year. The first reporting year for annual reporting purposes will begin on the permit effective date, and will last for a period of one year. Alternatively, if the City elects to report based on its fiscal year, the first reporting year will last until the end of the

fiscal year following the end of the first permit year. If the City elects to report based on calendar year, then the first reporting year will last until December 31, 2025. The City will submit the report based on calendar year.

Subsequent calendar years will begin at the beginning of the first reporting year and last for one year. The City shall also make a copy of the annual report readily available for review by the TCEQ personnel upon request. The report will include:

1. The status of the compliance with permit conditions, as assessment of the appropriateness of the identified BMPs, progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals;
2. A summary of the results of information collected and analyzed, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP;
3. If applicable, a summary of any activities taken to address the discharge to impaired water bodies, including any sampling results and a summary of the City's BMPs used to address the pollutant of concern;
4. A summary of the stormwater activities the City plans to undertake during the next reporting year;
5. Proposed changes to the SWMP, including any changes to any BMPs or any identified measurable goals that apply to the program elements;
6. Description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementation plans;
7. Notice that the City is relying on another government entity to satisfy some of its permit obligations (if applicable);
8. The number of construction activities where the City is the operator and authorized under the 8<sup>th</sup> optional MCM, including the total number of acres disturbed; and
9. The number of construction activities that occurred within the jurisdictional area of the City (as noticed as the City by the construction operator), and that were not authorized under the 8<sup>th</sup> MCM.

An annual report will be prepared whether or not the NOI and SWMP have been approved by the TCEQ. If the City has not implemented the SWMP or not begun to implement the SWMP because it has not received approval of the NOI and SWMP, then the annual report may include that information.

Effective December 21, 2020, the annual report will be submitted using the online electronic reporting system available through the TCEQ website as required.

The annual report will be submitted with the appropriate TCEQ reporting forms to the following addresses:

TCEQ  
Stormwater & Pretreatment Team (MC-148)  
PO Box 13087  
Austin, Texas 78711-3087

A copy of the annual report will also be submitted to the following address:

TCEQ  
2309 Gravel Road  
Fort Worth, Texas 76118-6951

## DEFINITIONS

**Arid Areas** - Areas with an average annual rainfall of less than ten (10) inches.

**Benchmarks** – A benchmark pollutant value is a guidance level indicator that helps determine the effectiveness of chosen best management practices (BMPs). This type of monitoring differs from compliance monitoring in that exceedances of the indicator or benchmark level are not permit violations, but rather indicators that can help identify problems at the MS4 with exposed or unidentified pollutant sources; or control measures that are either not working correctly, whose effectiveness need to be reconsidered, or that need to be supplemented with additional BMPs.

**Best Management Practices (BMPs)** - Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spills or leaks, waste disposal, or drainage from raw material storage areas.

**Catch basins** - Storm drain inlets and curb inlets to the storm drain system. Catch basins typically include a grate or curb inlet that may accumulate sediment, debris, and other pollutants.

**Classified Segment** - A water body that is listed and described in Appendix A or Appendix C of the Texas Surface Water Quality Standards, at 30 Texas Administrative Code (TAC) § 307.10.

**Clean Water Act (CWA)** - The Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972, Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96- 483 and Pub. L. 97-117, 33 U.S.C. 1251 et. seq.

**Common Plan of Development or Sale** - A construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development or sale is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities.

**Construction Activity** - Soil disturbance, including clearing, grading, and excavating; and not including routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing rights-of-way, and similar maintenance activities). Regulated construction activity is defined in terms of small and large construction activity.

**Small Construction Activity** is construction activity that results in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres of land.

**Large Construction Activity** is construction activity that results in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater

than five (5) acres of land.

**Construction Site Operator** - The entity or entities associated with a small or large construction project that meet(s) either of the following two criteria:

- a. The entity or entities that have operational control over construction plans and specifications (including approval of revisions) to the extent necessary to meet the requirements and conditions of this general permit; or
- b. The entity or entities that have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a stormwater pollution prevention plan (SWP3) for the site or other permit conditions (for example they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

**Control Measure** - Any best management practice or other method used to prevent or reduce the discharge of pollutants to water in the state.

**Conveyance** - Curbs, gutters, man-made channels and ditches, drains, pipes, and other constructed features designed or used for flood control or to otherwise transport stormwater runoff.

**Discharge** – When used without a qualifier, refers to the discharge of stormwater runoff or certain non- stormwater discharges as allowed under the authorization of this general permit.

**Final Stabilization** - A construction site where any of the following conditions are met:

- a. All soil disturbing activities at the site have been completed and a uniform (for example, evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.
- b. For individual lots in a residential construction site by either:
  - i. The homebuilder completing final stabilization as specified in condition (a) above; or
  - ii. The homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization.
- c. For construction activities on land used for agricultural purposes (for example pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to a surface water and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition (a) above.
- d. In arid, semi-arid, and drought-stricken areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:
  - i. Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base

to provide erosion control for at least three years without active maintenance by the operator, and

- ii. The temporary erosion control measures are selected, designed, and installed to achieve 70 percent vegetative coverage within three years.

**General Permit** - A permit issued to authorize the discharge of into or adjacent to water in the state for one or more categories of waste discharge within a geographical area of the state or the entire state as provided by Texas Water Code (TWC) §26.040.

**Groundwater Infiltration** - For the purposes of this permit, groundwater that enters a municipal separate storm sewer system (including sewer service connections and foundation drains) through such means as defective pipes, pipe joints, connections, or manholes.

**High Priority Facilities** - High priority facilities are facilities with a high potential to generate stormwater pollutants. These facilities must include, at a minimum, the MS4 operator's maintenance yards, hazardous waste facilities, fuel storage locations, and other facilities where chemicals or other materials have a high potential to be discharged in stormwater. Among the factors that must be considered when giving a facility a high priority ranking are: the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to water bodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s).

**Hyperchlorinated Water** – Water resulting from hyperchlorination of waterlines or vessels, with a chlorine concentration greater than 10 milligrams per liter (mg/L).

**Illicit Connection** - Any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

**Illicit Discharge** - Any discharge to a municipal separate storm sewer that is not entirely composed of stormwater, except discharges pursuant to this general permit or a separate authorization and discharges resulting from emergency firefighting activities.

**Impaired Water** - A surface water body that is identified on the latest approved CWA §303(d) List as not meeting applicable state water quality standards. Impaired waters include waters with approved or established total maximum daily loads (TMDLs), and those where a TMDL has been proposed by TCEQ but has not yet been approved or established.

**Indian Country** - Defined in 18 USC § 1151 as: (a) All land within the limits of any Indian reservation under the jurisdiction of the United States (U.S.) Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) All dependent Indian communities within the borders of the U.S. whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state; and (c) All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe.

**Indicator Pollutant** - An easily measured pollutant, that may or may not impact water quality that indicates the presence of other stormwater pollutants.

**Industrial Activity** - Any of the ten (10) categories of industrial activities included in the definition of “stormwater discharges associated with industrial activity” as defined in 40 Code of Federal Regulations (CFR) §122.26(b)(14)(i)-(ix) and (xi).

**Infeasible** – For the purpose of this permit, infeasible means not technically possible, or not economically practicable and achievable in light of best industry practices. The TCEQ notes that it does not intend for any small MS4 permit requirement to conflict with state water right laws.

**Major Outfall** – means a municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more).

**Maximum Extent Practicable (MEP)** - The technology-based discharge standard for municipal separate storm sewer systems (MS4s) to reduce pollutants in stormwater discharges that was established by the CWA § 402(p). A discussion of MEP as it applies to small MS4s is found in 40 CFR § 122.34.

**MS4 Operator** - For the purpose of this permit, the public entity or the entity contracted by the public entity, responsible for management and operation of the small municipal separate storm sewer system that is subject to the terms of this general permit.

**Municipal Separate Storm Sewer System (MS4)** - A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- a. Owned or operated by the U.S., a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under the CWA §208 that discharges to surface water in the state;
- b. That is designed or used for collecting or conveying stormwater;
- c. That is not a combined sewer; and
- d. That is not part of a publicly owned treatment works (POTW) as defined in 40 CFR §122.2.

**Non-traditional Small MS4** - A small MS4 that often cannot pass ordinances and may not have the enforcement authority like a traditional small MS4 would have to enforce the stormwater management program. Examples of non-traditional small MS4s include counties, transportation authorities (including the Texas Department of Transportation), municipal utility districts, drainage districts, military bases, prisons and universities.

**Notice of Change (NOC)** - A written notification from the permittee to the executive director providing changes to information that was previously provided to the agency in a notice of intent.

**Notice of Intent (NOI)** - A written submission to the executive director from an applicant requesting coverage under this general permit.

**Notice of Termination (NOT)** - A written submission to the executive director from a permittee

authorized under a general permit requesting termination of coverage under this general permit.

**Outfall** - A point source at the point where a small MS4 discharges to waters of the U.S. and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S. For the purpose of this permit, sheet flow leaving a linear transportation system without channelization is not considered an outfall. Point sources such as curb cuts; traffic or right-of-way barriers with drainage slots that drain into open culverts, open swales or an adjacent property, or otherwise not actually discharging into waters of the U.S. are not considered an outfall.

**Permittee** - The MS4 operator authorized under this general permit.

**Point Source** - (from 40 CFR § 122.22) any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

**Pollutant(s) of Concern (POC)** – For the purpose of this permit, includes biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids (TSS), turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from an MS4.(Definition from 40 CFR § 122.32(e)(3)).

**Redevelopment** - Alterations of a property that changed the "footprint" of a site or building in such a way that there is a disturbance of equal to or greater than one (1) acre of land. This term does not include such activities as exterior remodeling, routine maintenance activities, and linear utility installation.

**Semiarid Areas** - Areas with an average annual rainfall of at least ten (10) inches, but less than 20 inches.

**Small Municipal Separate Storm Sewer System (MS4)** – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

- a. Owned or operated by the U.S., a state, city, town, borough, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under CWA § 208;
- b. Designed or used for collecting or conveying stormwater;
- c. Which is not a combined sewer;
- d. Which is not part of a publicly owned treatment works (POTW) as defined in 40 CFR § 122.2; and
- e. Which was not previously regulated under a National Pollutant Discharge Elimination System (NPDES) or a Texas Pollutant Discharge Elimination System (TPDES)

individual permit as a medium or large municipal separate storm sewer system, as defined in 40 CFR §§122.26(b)(4) and (b)(7).

This term includes systems similar to separate storm sewer systems at military bases, large hospitals or prison complexes, and highways and other thoroughfares. This term does not include separate storm sewers in very discrete areas, such as individual buildings. For the purpose of this permit, a very discrete system also includes storm drains associated with certain municipal offices and education facilities serving a nonresidential population, where those storm drains do not function as a system, and where the buildings are not physically interconnected to a small MS4 that is also operated by that public entity.

**Stormwater and Stormwater Runoff** - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

**Stormwater Associated with Construction Activity** - Stormwater runoff from an area where there is either a large construction or a small construction activity.

**Stormwater Management Program (SWMP)** - A comprehensive program to manage the quality of discharges from the municipal separate storm sewer system.

**Structural Control (or Practice)** - A pollution prevention practice that requires the construction of a device, or the use of a device, to capture or prevent pollution in stormwater runoff. Structural controls and practices may include but are not limited to: wet ponds, bioretention, infiltration basins, stormwater wetlands, silt fences, earthen dikes, drainage swales, vegetative lined ditches, vegetative filter strips, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.

**Surface Water in the State** - Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from the mean high water mark (MHW) out 10.36 miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or unnavigable, and including the beds and banks of all water courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

**Total Maximum Daily Load (TMDL)** - The total amount of a substance that a water body can assimilate and still meet the Texas Surface Water Quality Standards.

**Traditional Small MS4** - A small MS4 that can pass ordinances and have the enforcement authority to enforce the stormwater management program. An example of traditional MS4s includes cities.

**Urbanized Area (UA)** - An area of high population density that may include multiple small MS4s as defined and used by the U.S. Census Bureau in the 2000 and the 2010 Decennial census.

**Waters of the United States** - (According to 40 CFR § 122.2) Waters of the United States or waters of the U.S. means:

- a. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and

- flow of the tide;
- b. All interstate waters, including interstate wetlands;
  - c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
    - i. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
    - ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    - iii. Which are used or could be used for industrial purposes by industries in interstate commerce;
  - d. All impoundments of waters otherwise defined as waters of the United States under this definition;
  - e. Tributaries of waters identified in paragraphs (a) through (d) of this definition;
  - f. The territorial sea; and
  - g. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds as defined in 40 CFR § 423.11(m) which also meet the criteria of this definition) are not waters of the U.S. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the U.S. (such as disposal area in wetlands) nor resulted from the impoundment of waters of the U.S. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding the CWA jurisdiction remains with the EPA.

*Note: Definitions obtained from the 2019 revision of the TPDES General Permit No. TXR040000 and North Central Texas Council of Governments, Stormwater BMPs, dated September 2002.*

## COMMONLY USED ACRONYMS

BMP	Best Management Practice
CFR	Code of Federal Regulations
CGP	Construction General Permit, TXR150000
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
FR	Federal Register
IP	Implementation Process
MCM	Minimum Control Measure
MSGP	Multi-Sector General Permit
MS4	Municipal Separate Storm Sewer System
NOC	Notice of Change
NOD	Notice of Deficiency
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
SWMP	Stormwater Management Program
SWP3	Stormwater Pollution Prevention Plan
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TPDES	Texas Pollutant Discharge Elimination System
TWC	Texas Water Code

**IDDE GUIDANCE**

**APPENDIX A**

Insert IIDE Guidance Document

**DRY WEATHER SCREENING  
REGIONAL PROTOCOL**

**APPENDIX B**

Insert Dry Weather Screening Protocol

**CONSRUCTION INSPECTION  
MANUAL AND CHECKLIST**

**APPENDIX C**

## Construction Stormwater Inspection Manual



Department of Public Services  
911 Winscott Road  
Benbrook, Texas 76126

November 4, 2014

## **1.0 Introduction and Purpose**

The Benbrook Department of Public Services (PS) considers there to be two types of inspections relating to stormwater: compliance inspections and self-inspections.

This manual is for use PS inspectors in performing compliance inspections, as well as for site operators in performing self inspections. This manual should be used in conjunction with the Texas Commission On Environmental Quality (TCEQ) General Permit TXR150000.

### **1.1 Compliance Inspections**

Regulatory compliance inspections are performed by regulatory oversight authorities such as PS staff or representatives of PS. These inspections are intended to determine compliance with the State and City requirements for control of construction stormwater through erosion and sediment control and post construction practices. Compliance inspections focus on determinations of compliance with legal and water quality standards. Typically, compliance inspections can be further sub-categorized to include comprehensive inspections, and follow-up or reconnaissance inspections.

Compliance inspectors will focus on determining whether:

- The project is causing water quality standard violations;
- The required Stormwater Pollution Prevention Plan (SWPPP) includes appropriate erosion and sediment controls, and to some extent, post construction controls;
- The owner/operator is complying with the SWPPP;
- Where required, self-inspections are being properly performed; and
- Where self-inspections are required, the owner/operator responds appropriately to the self-inspector's report.

#### **1.1.1 Comprehensive Inspection**

Comprehensive inspections are designed to verify permittee compliance with all applicable regulatory requirements, effluent controls, and compliance schedules. This inspection involves record reviews, visual observations, and evaluations of management practices, effluents and receiving waters.

Comprehensive inspections should be conducted according to a neutral or random inspection scheme, or in accordance with established priorities. A neutral monitoring scheme provides some objective basis for scheduling inspections and sampling visits by establishing a system for setting priorities to ensure that a particular facility is not unfairly selected for inspection or sampling. The selection of which facility to inspect must be made without bias to ensure that the

regulatory oversight authority, if challenged for being arbitrary and capricious manner, can reasonable defend itself.

A neutral inspection scheme should set the criteria the inspector uses to choose which facilities to inspect, but the schedule for the actual inspection should remain confidential, and may be kept separate from the plan.

A routine comprehensive compliance inspection is most effective when it is unannounced or conducted with very little advanced warning.

### **1.1.2 Reconnaissance Inspection**

A reconnaissance inspection is performed in lieu of, or preceding a comprehensive inspection to obtain a preliminary overview of an owner/operator's compliance program, to respond to a citizen complaint, or to assess a non-permitted site. The inspector performs a brief (generally about one hour) visual inspection of the site, discharges and receiving waters. A reconnaissance inspection uses the inspector's experience and judgment to summarize potential compliance problems, without conducting a full comprehensive inspection. The objective of a reconnaissance inspection is to expand inspection coverage without increasing inspection resource expenditures. The reconnaissance inspections is the shortest and least resource intensive of all inspections.

Reconnaissance inspections may be initiated in response to known or suspected violations, a public complaint, a violation of regulatory requirements, or as follow-up to verify that necessary actions were taken in response to a previous inspection.

### **1.2 Self-Inspections**

For some projects, the site owner/operator is required by Texas Pollutant Discharge Elimination System (TPDES) Permit to have a qualified professional perform a "self-inspection" at the site. The qualified professional determines whether the site is being managed in accordance with the SWPPP, and whether the SWPPP's recommended erosion and sediment controls are effective. If activities are not in accordance with the SWPPP, or if the SWPPP erosion and sediment controls are not effective, the qualified professional inspecting the site recommends corrections to the owner/operator.

## **2.0 Pre-Inspection Activities**

This section is intended for inspectors with regulatory oversight authority such as agents of PS or others acting on their behalf. Before arriving on site to conduct the inspection, considerations concerning communication, documentation and equipment must be made.

### **2.1 Communication**

#### **Coordination with other entities**

Where appropriate, prior to selecting sites for inspection, compliance inspectors should communicate with other regulatory oversight authorities to avoid unnecessary duplication or to coordinate follow-up to inspections performed by other regulatory oversight authorities.

#### **Announced vs Unannounced Inspection**

Inspections may be announced or unannounced. Each method has its own advantages and disadvantages. Unannounced inspections are preferred; however, many job sites are not continuously manned, or not always staffed by someone who is familiar with the SWPPP, thus necessitating an announced inspection. As an alternative, when an announced inspection is necessary, inspectors should try to give as little advanced warning as possible (24 hours is suggested).

#### **Itinerary**

For obvious safety reasons, inspectors should be sure to inform someone in their office which site or sites they will be visiting prior to leaving the office to perform the inspections.

### **2.2 Documentation**

#### **Data Review**

The inspector should review any available information such as:

- Notice of Intent
- Stormwater Pollution Prevention Plan
- Past inspection records
- Phasing plan
- Construction sequence
- Inspection and Maintenance schedules
- Site specific issues
- Consent Orders
- Access Agreements

#### **Inspection Form**

The inspector should have copies of, and be familiar with, the inspection form used by PS as shown in Appendix A before leaving the office. Static information such as name, location, and permit number can be entered onto the inspection form prior to arriving at the inspection site.

## **Credentials**

Inspectors should always carry proper identification to prove that they are employed by Benbrook. Failure to display proper credentials may be legal grounds for denial of entry to a site.

## **2.3 Equipment**

### **Personal Protective Equipment**

PS employees must conform to the Benbrook Safety Plan as it relates to personal protective equipment. Other regulatory oversight authorities should have their own safety plan.

The following is a list of some of the most common health and safety gear that may be needed:

- Hard hat
- Safety toe shoes
- Reflective vest
- Hearing protection (to achieve 85 dBA – 8 hr TWA)
- Safety glasses with side shields

If the construction site is on an industrial site or a hazardous waste site, special training may be required prior to entering the site. The inspector should consult with PS supervisor prior to entering such a site.

### **Monitoring Equipment**

The following is a list of some equipment that may be helpful to document facts and verify compliance:

- Digital camera
- Measuring tape or wheel
- Hand level
- Turbidity meter (in limited circumstances)

## **2.4 Permittee's Self Inspection**

This section is intended for qualified professionals who conduct site self-inspections on behalf of owner/operators. Self-inspectors are responsible for performing inspections in accordance with permit requirements and reporting to site owners and operators the results and any recommendations resulting from the inspection.

Prior to conducting inspections, qualified professionals should ensure familiarity with the Stormwater Pollution Prevention Plan and previous site inspection reports.

### 3.0 On-Site Inspection Process

This section covers on-site inspection process for compliance inspections, non-permitted site inspections and self-inspections.

#### 3.1 Compliance Inspections

##### Professionalism

*Don't Pretend To Possess Knowledge*

**Unless the inspector has experience with a particular management practice, do not pretend to possess knowledge.** Inspectors cannot be experts in all areas; their job is to collect information, not to demonstrate superior wisdom. Site operators are often willing to talk to someone who is inquisitive and interested. Within reason, asking questions to obtain new information about a management practice, construction technique or piece of equipment is one of the inspector's main roles in inspection.

*Don't Recommend Solutions*

**The inspector should not recommend solutions or endorse products.** The solution to a compliance problem may appear obvious based on the inspector's experience. However, the responsibility should be placed on the site owner to implement a workable solution to a compliance problem that meets PS standards. The inspector should refer the site operator to TCEQ's or North Central Texas Council of Governments integrated Stormwater Manual's websites for information.

Key advice must be offered carefully. One experienced stormwater inspector suggests saying: "I can't direct you or make recommendations, but what we've seen work in other situations is"

The way inspectors present themselves is important to the effectiveness of the inspection. An inspector cannot be overly familiar, but will be more effective if able to establish a minimum level of communication.

##### Safety

PS employees must conform to the Benbrook Safety Plan and department policies when on a construction site. Other regulatory oversight authorities should have their own safety policies.

Some general protections for construction sites are:

- Beware of heavy equipment, avoid operator blind spots and make sure of operator eye contact around heavy equipment.
- Avoid walking on rock rip-rap if possible. Loose rock presents a slip hazard.
- Stay out of confined spaces like tanks, trenches and foundation holes.
- Avoid lightning danger. Monitor weather conditions, get out of water, avoid open areas and high points, and do not huddle in groups or near trees.
- Protect yourself from sun and heat exposure. Use sun screen or shade clothing.
- Remain hydrated by drinking water, watching for signs of heat cramps, exhaustion (fatigue, nausea, dizziness, headache, cool or moist skin), or stroke (high body temperature; red, hot and dry skin)
- Protect yourself from cold weather. Wear multiple layers of thin clothing. Wear a warm

- hat. Drink warm fluids or eat hot foods and keep dry.
- Avoid scaffolding in excess of 4 feet above grade.
- Beware of ticks, stinging insects, snakes, and poison ivy or sumac.

### **Legal Access**

PS's representatives have the authority to enter at all times in or upon any property, public or private, for the purpose of inspecting or investigating conditions affecting the construction of improvements to or developments of water resources for public health, safety or welfare.

PS's representatives, upon presentation of their credentials, may enter upon any premises where any effluent source is located, or in which records are required to be maintained. The representative may at reasonable times have access to, and sample discharges/pollutants to the waters or to publicly owned treatment plants where the effluent source is located. This subparagraph provides PS representatives performing their duties authority to enter a site to pursue administrative violations. Pursuing criminal violations may require a warrant or the owner's permission to enter the site.

For sites that are permitted, PS has the authority under the permit to enter the site.

If the owner/operator's representatives onsite deny access, the inspector should not physically force entry. Under these circumstances the attorney representing the inspector should be immediately notified and consideration should be given to soliciting the aid of a law officer to obtain entry.

PS staff has the right to enter at any reasonable time. If no one is available, and the site is fenced or posted, PS staff should make all reasonable efforts to identify, contact and notify the owner that the PS is entering the site. If the inspector has made all reasonable efforts to contact site owners, but was unable to do so, the site can then be accessed. All efforts should be taken not to cause any damage to the facility.

### **Find The Legal Responsible Party**

The first action a compliance inspector should take upon entering a construction site is to find the construction trailer or the construction or project manager if they are available. The inspector should present appropriate identification to the site's responsible party and state the reason for the inspection; construction stormwater complaint response or neutral construction stormwater inspection. If the inspection is initiated as a response to a complaint, frequently the responsible party will ask who made the complaint. PS keeps private individual complainants confidential. If the complainant is another regulatory oversight authority, PS tends to make that known to the site's responsible party.

### **On-site Records Review (NOI, SWPPP, Self-Inspection Reports, Permit)**

Generally, the compliance inspector should next review the on-site records. Verify that a copy of the construction stormwater permit and NOI are on-site. Verify that the acreage, site conditions, and receiving water listed on the NOI are accurate. Compare the on-site documentation with documentation already submitted to, or obtained by the compliance inspector.

If the SWPPP has not been reviewed in the office, verify that it exists and contains the minimum required components. On-site review of the SWPPP should determine if: there is an appropriate phasing plan; the acreage disturbed in each phase, construction sequence for each phase; proposed

implementation of erosion and sediment control measures; and, where required, post construction controls. For each of the erosion and sediment control practices, the SWPPP must show design details in accordance with the TCEQ standards. The SWPPP must also include provisions for maintenance of practices during construction. On-site review of post construction controls is generally limited to verification that the proposed stormwater management practices are shown on the site plan.

Where self-inspections are required, self-inspection reports are a significant tool for the compliance inspector to determine the performance history of the site. The self-inspection reports should be done with the required frequency. Self-inspection reports must include all the details required by the permit. Generally, it is desirable for permit information to be shown on a site plan. The compliance inspector should become familiar with the report and use that familiarity to judge whether the self-inspections are being performed correctly and that the site operator is correcting deficiencies noted in the report.

### **Walk The Site**

During wet weather conditions, it may be advantageous to observe the receiving waters prior to walking the rest of the site. At some point during the inspection, the receiving water conditions must be observed and noted. It is critical to note if there is a substantial visible contrast to natural conditions, or evidence of deposition, streambank erosion, construction debris or waste materials in the receiving stream.

Each inspector should evaluate actual implementation and maintenance of practices on-site compared to how implementation and maintenance is detailed in the SWPPP. At a minimum, the compliance inspector should observe all areas of active construction. Observing equipment or materials storage, recently stabilized areas, or stockpile areas is appropriate to evaluate the effectiveness of management practices.

### **Taking Photographs**

Evidence of poor receiving water conditions and poor or ineffective practices should be documented with digital photographs. Those photographs should be logged date stamped and stored on media that cannot be edited (e.g. write only CDs). Photos should also be appended to the site inspector's report. It is also beneficial to take photographs of good practices for educational and technology transfer reasons.

### **Exit Interview**

Clearly communicate expectations and consequences. If it is clear from the inspection that the owner/operator must modify the SWPPP, or modify management practices within an assigned period (e.g. 24 hours, 48 hours, one week, two weeks), then that finding should be communicated at the time of the exit interview. The inspector should assign the period based on factors such as how long it would reasonably take to complete such modifications and the level of risk to water quality associated with failure to make such modifications.

The inspector should make clear that PS reserves the rights to future enforcement actions. If the inspector's supervisor or enforcement coordinator determines additional enforcement actions are necessary, the inspector **should not** reassure the owner/operator that the current situation is acceptable.

## **3.2 Non-permitted Site Inspections**

For sites not authorized in accordance with state or City laws, the process will be abbreviated. First verify the need for authorization and observe receiving waters to detect water quality standard violations. If there is a violation, notify the owner of the violation or other compliance actions in response to their illegal activity. For PS staff, Appendix B or a similar notice can be used to notify the site owner/operator that stormwater authorization is required.

### **3.3 Self-Inspections**

The role of the self-inspector is to verify that the site is complying with stormwater requirements. In particular, the self-inspector verifies that the SWPPP is being properly implemented. The self-inspector also documents SWPPP implementation so regulatory agencies can review implementation activities.

**It is not the role of the self-inspector to report directly to regulatory authorities.**

#### **Purpose**

The self-inspector should ensure that the project's SWPPP is being properly implemented. This includes ensuring that the erosion and sediment control practices are properly installed and being maintained in accordance with the SWPPP, permit requirements and other guidance documents.

The project must be properly phased to limit the disturbance, and the construction sequence for each phase must be followed. The SWPPP must also be modified to address evolving circumstances. Finally, and most importantly, receiving waters must be protected.

#### **Pre-construction Meeting**

The parties responsible for various aspects of stormwater compliance should be identified at the pre-construction meeting. Responsible parties may include, but not limited to, owner's engineer, owner/operator/permittee, contractors and subcontractors.

Typical responsibilities include: installation of erosion and sediment control practices; maintenance of erosion and sediment control practices, inspection, installation of post construction stormwater management practices, inspection of post construction stormwater management practices, SWPPP revisions and contractor direction.

#### **Self-inspection Components**

Inspect installation, performance and maintenance of all erosion and sediment control practices. The self-inspector should inspect all areas that are under construction and areas that are vulnerable to erosion. The self-inspector should also inspect areas that will be disturbed prior to the next inspection for measures required prior to construction (e.g. silt fence, stabilized construction entrance, diversions). Finally, self-inspectors should inspect post-construction controls during and after installation.

Identify site deficiencies and corrective measures. The self-inspector's reports must be maintained in a log book on site and the log book must be made available to the regulatory authorities. Although the legal responsibility for filing a Notice of Termination lies with the owner/operator, the self-inspector may also be called upon to perform a final site inspection, including post-construction stormwater management practices, prior to filing the Notice of Termination.

### **4.0 Post-Inspection Activities**

## **4.1 Regulatory Oversight Authorities**

This section is intended for inspectors with regulatory oversight authority such as agents of PS or others acting on their behalf. Upon completion of an inspection, inspection results should be documented for the record.

The inspector should inform the permittee or the on-site representative of their inspection results in writing by sending the permittee a complete, signed copy of the inspection report. The inspection report should be transmitted under a cover letter that elaborates on any deficiencies noted in the inspection report. It is not a good idea to commend exceptional efforts by the owner/operator in a letter, because such letters tend to undermine enforcement efforts when compliance status at a site degrades.

The inspector should consider providing a copy of the cover letter and inspection report to other parties with including:

- Permittee
- Contractor(s)
- Other regulatory oversight authorities
- Other parties present during the inspection

For PS staff, an example of the inspection cover letter is included as Appendix C.

## **4.2 Permittee's Self-inspections**

This section is intended for qualified professionals who conduct site inspections for permittees in accordance with a TPDES permit.

### **Inspection Reports**

The inspector shall prepare a written report summarizing inspection results. The inspection report is then provided to the permittee, or the permittee's duly authorized representative, and to the contractor responsible for implementing stormwater controls on-site in order to correct deficiencies noted in the inspection report. Finally, the inspection report must be added to the site log book that is required to be maintained on-site, and be available to regulatory oversight authorities for review.

### **Stormwater Pollution Prevention Plan Revisions**

The inspector must inform the permittee of his/her duty to amend the SWPPP whenever an inspection proves the SWPPP to be ineffective in:

- Eliminating or significantly minimizing pollutants from on-site sources
- Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity
- Eliminating discharges that cause a substantial visible contrast to natural conditions

## **Appendix A**

### **Construction Stormwater Compliance Inspection Report**

INSERT INSPECTION REPORT FORM

## **Appendix B**

### **Notice**

**\*\*\*\* NOTICE \*\*\*\***

On March 10, 2003, provisions of the Federal Clean Water Act went into effect that applies to many construction operations.

If your construction operations result in the disturbance of one acre or greater and stormwater runoff from your site reaches surface waters (i.e., lake, road side ditch, swale, storm sewer system, etc.), the stormwater runoff from your site must be covered by a Texas Pollutant Discharge Elimination System (TPDES) Permit issued by the Texas Commission On Environmental Quality (TCEQ).

To facilitate your compliance with the law, TCEQ has issued a General Permit which may be applicable to your project. To obtain coverage under this General Permit, you need to prepare a Stormwater Pollution Prevention Plan (SWPPP) and then file a Notice of Intent (NOI) with the TCEQ and submit a copy to Benbrook Public Services. All the SWPPP requirements and forms can be found on the TCEQ website.

When you file your NOI you are certifying that you have developed a SWPPP and that it will be implemented prior to commencing construction. When you submit the NOI you need to indicate if your SWPPP is in conformance with published TCEQ technical standards.

**Failure to have the required permit can result in legal actions which in Stop Work Orders and/or monetary penalties.**

If your construction operations are already in progress and you are not covered by an appropriate TPDES permit contact the TCEQ Regional Office as soon as possible. If your construction field operations have not yet commenced, review the NOI and the General Permit on the TCEQ's website or at the TCEQ Regional Office for your area. When you are comfortable that you understand and comply with the requirements, file your NOI.

The requirement to file an NOI does not replace any City requirements. Developers/Contractors are directed to contact the Benbrook Public Services Department for City requirements.

## **Appendix C**

### **Inspection Cover Letter Example**

<<City Letterhead>>

<<Date>>

Mr. John Smith 123 Main Street  
Any Town, Texas 12345

**Re: Stormwater Inspection Site Name  
Site Location**

Dear Mr. Smith:

On the afternoon of <<date>> I conducted an inspection of the construction activities associated with the <<Site Location>> located at <<site address>>, <<City>>, Texas. The inspection was conducted in the presence of <<name of site representative(s)>>. The purpose of the inspection was to verify compliance with the Texas Pollutant Discharge Elimination System General Permit for Storm Water Discharges from Construction Activities (the general permit).

The overall rating for the project at the time of the inspection was **unsatisfactory**. A copy of my inspection report is attached for your information. In addition to the report, I would like to elaborate on the following:

<<list any deficiencies as needed under these headings or others as needed. The regulatory citation needs to be included with each deficiency.>>

**SWPPP Content Record Keeping Visual Observations**

If you have any questions or comments, please feel free to contact me at (817) 249-6063. Sincerely,

Bennett C. Howell, III, PE, CFM  
Director of Public Services